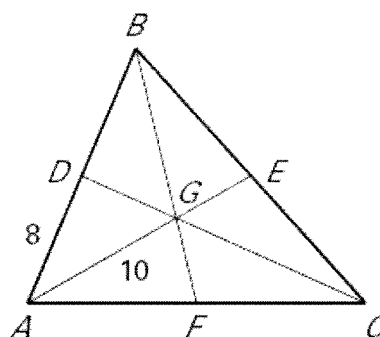


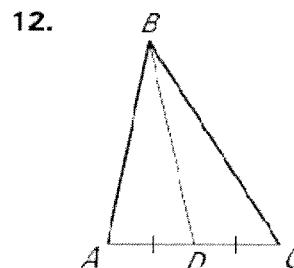
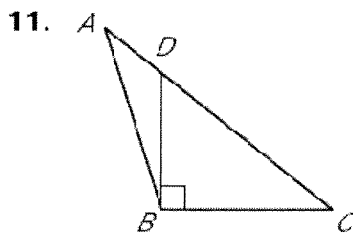
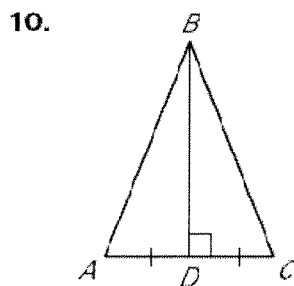
Ignore all the numbering, I just copy and pasted. Do ALL problems 😊

G is the centroid of $\triangle ABC$, $AD = 8$, $AG = 10$, and $CD = 18$. Find the length of the segment.

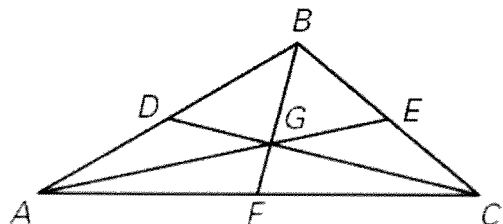
- | | |
|--------------------|--------------------|
| 1. \overline{BD} | 2. \overline{AB} |
| 3. \overline{EG} | 4. \overline{AE} |
| 5. \overline{CG} | 6. \overline{DG} |



Is \overline{BD} a perpendicular bisector of $\triangle ABC$? Is \overline{BD} a median? an altitude?



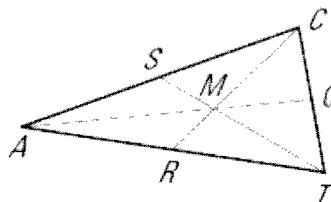
In Exercises 1–3, use the diagram.
 G is the centroid of $\triangle ABC$.



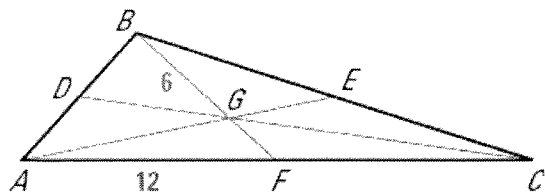
- If $BG = 9$, find BF .
- If $BD = 12$, find AD .
- If $CD = 27$, find GC .

7. ★ **MULTIPLE CHOICE** In the diagram, M is the centroid of $\triangle ACT$, $CM = 36$, $MQ = 30$, and $TS = 56$. What is AM ? **D**

- | | |
|--------|--------|
| (A) 15 | (B) 30 |
| (C) 36 | (D) 60 |



FINDING LENGTHS G is the centroid of $\triangle ABC$, $BG = 6$, $AF = 12$, and $AE = 15$. Find the length of the segment.



3. \overline{FC}

4. \overline{BF}

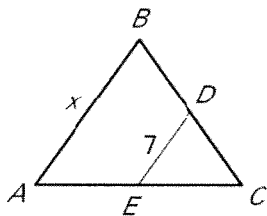
5. \overline{AG}

6. \overline{GE}

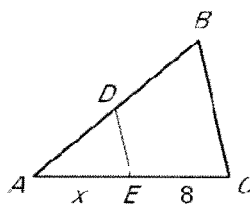
Section 5-1 (Look at notes if needed)

\overline{DE} is a midsegment of $\triangle ABC$. Find the value of x .

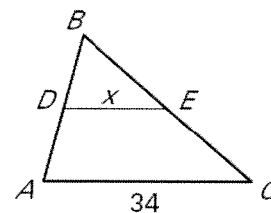
1.



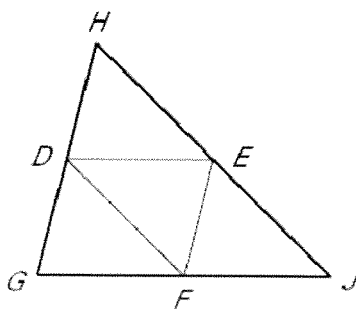
2.



3.



Use $\triangle GHJ$, where D , E , and F are midpoints of the sides.



14. If $DE = 4x + 5$ and $GJ = 3x + 25$, what is DE ?

15. If $EF = 2x + 7$ and $GH = 5x - 1$, what is EF ?

16. If $HJ = 8x - 2$ and $DF = 2x + 11$, what is HJ ?